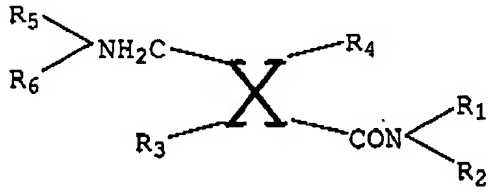
COMPLETE LISTING OF CLAIMS

1 (CURRENTLY AMENDED) A compound of the formula:



wherein:

R_1, R_2 and R_5 are independently selected from the group consisting of H and C_1--C_2 alkyl;

R_3 and R_4 are selected from C_2--C_8 alkyl;

R_6 is selected from the group consisting of H and the L-isomer (amino acid convention) of R_7--$(CH_2)_n$--$HC(NH_2)$--CO--;

wherein

n is an integer from 0 to 3;

R_7 is selected from the group consisting of unsubstituted heteroaryl and monosubstituted heteroaryl, wherein said heteroaryl is ~~selected from the group consisting of furanyl, pyrrolyl, thiophenyl,~~ pyridinyl, ~~indolyl, benzofuranyl, benzothiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, pyrazinyl, primidinyl, purinyl, and pteridinyl,~~ and said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

X is independently selected in each instance from the group consisting of trans, trans >C=CH--HC=C<, trans >C=C<, and >C*H--$(CH_2)_m$--HC*<, where "*" indicates a chiral carbon atom and R_3 and R_4 are oriented L- and D- (amino acid convention) at these respective chiral centers; and

m = 0, 1 or 2,

or a pharmaceutically acceptable salt, solvate or prodrug thereof.

2 (CURRENTLY AMENDED) The compound of claim 33 ~~1~~ wherein R_1, R_2 and R_5 are hydrogen.

3 (CURRENTLY AMENDED) The compound of claim 33 ~~1~~ wherein R_1 is methyl and R_2 and R_5 are hydrogen.

4 (CURRENTLY AMENDED) The compound of claim 33 ~~1~~ wherein R_1 and R_2 are methyl and R_5 is hydrogen.

5 (CURRENTLY AMENDED) The compound of claim 33 ~~1~~ wherein R_1 and R_2 are hydrogen and R_5 is methyl.

6 (CURRENTLY AMENDED) The compound of claim 33 ~~1~~ wherein R_1, R_2 and R_5 are methyl.

7 (CANCELED)

8 (CANCELED)

9 (CANCELED)

10 (CANCELED)

11 (CANCELED)

12 (CANCELED)

13 (CANCELED)

14 (CANCELED)

15 (CANCELED)

16 (CANCELED)

17 (CANCELED)

18 (CANCELED)

19 (CANCELED)

20 (CANCELED)

21 (CANCELED)

22 (CANCELED)

23 (CURRENTLY AMENDED) The compound of claim 34 ~~22~~ wherein R_1, R_2 and R_5 are hydrogen.

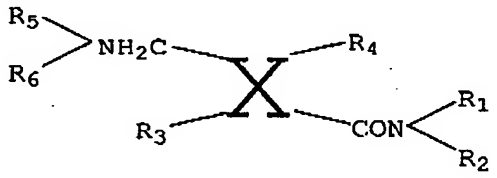
24 (CURRENTLY AMENDED) The compound of claim 34 ~~22~~ wherein R_1 is methyl and R_2 and R_5 are hydrogen.

25 (CURRENTLY AMENDED) The compound of claim 34 ~~22~~ wherein R_1 and R_2 are methyl and R_5 is hydrogen.

26 (CURRENTLY AMENDED) The compound of claim 34 ~~22~~ wherein R_1 and R_2 are hydrogen and R_5 is methyl.

27 (CURRENTLY AMENDED) The compound of claim 34 ~~22~~ wherein R_1, R_2 and R_5 are methyl.

28 (CURRENTLY AMENDED) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound of the formula



wherein:

R_1, R_2 and R_5 are independently selected from the group consisting of H and C_1--C_2 alkyl;

R_3 and R_4 are selected from C_2--C_8 alkyl;

R_6 is selected from H and the L-isomer (amino acid convention) of R_7--$(CH_2)_n$--$HC(NH_2)$--CO-;

wherein

n is an integer from 0 to 3;

R_7 is selected from the group consisting of unsubstituted heteroaryl and monosubstituted heteroaryl, wherein said is ~~selected from the group consisting of furanyl, pyrrolyl, thiophenyl,~~ pyridinyl, ~~indolyl, benzofuranyl, benzothiophenyl, quinolinyl,~~

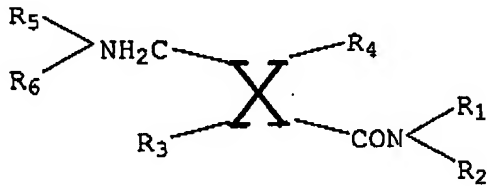
~~isoquinolinyl, imidazolyl, thiazolyl, pyrazinyl, primidinyl, purinyl, and pteridinyl,~~ and said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

X is independently selected in each instance from the group consisting of trans, trans >C=CH--HC=C<, trans >C=C<, and >C*H--$(CH_2)_m$--HC*< where "*" indicates a chiral center and R_3 and R_4 are oriented L- and D- (amino acid convention) at these respective chiral centers; and

m = 0, 1 or 2, or

a pharmaceutically acceptable salt, solvate or prodrug thereof.

29 (CURRENTLY AMENDED) A method of treating a mammal affected with the magnesium-binding defect, comprising administering to the mammal a pharmaceutically effective amount of a compound of the formula



wherein:

R_1, R_2 and R_5 are independently selected from the group consisting of H and C_1--C_2 alkyl;

R_3 and R_4 are selected from C_2--C_8 alkyl;

R_6 is selected from the group consisting of H and the L-isomer (amino acid convention) of R_7--$(CH_2)_n$--$HC(NH_2)$--CO-;

wherein

n is an integer from 0 to 3;

R_7 is selected from the group consisting of unsubstituted heteroaryl and monosubstituted heteroaryl, wherein said heteroaryl is ~~selected from the group consisting of furanyl, pyrrolyl, thiophenyl,~~ pyridinyl, ~~indolyl, benzofuranyl, benzothiophenyl,~~

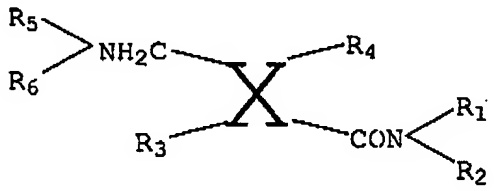
~~quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, pyrazinyl, primidinyl, purinyl, and pteridinyl,~~ and said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

X is independently selected from the group consisting of trans, trans >C=CH--HC=C<, trans >C=C<, and >C*H--$(CH_2)_m$--HC*< where "*" indicates a chiral carbon atom and R_3 and R_4 are oriented L- and D- (amino acid convention) at these respective chiral centers; and

m = 0, 1 or 2, or

a pharmaceutically acceptable salt, solvate or prodrug thereof.

30 (CURRENTLY AMENDED) A method of treating a mammal with salt-sensitive, essential hypertension, comprising administering to the mammal a pharmaceutically effective amount of a compound of the formula:



wherein:

R_1, R_2 and R_5 are independently selected from the group consisting of H and C_1--C_2 alkyl;

R_3 and R_4 are selected C_2–C_8 alkyl;

R_6 is selected from the group consisting of H and the L-isomer (amino acid convention) of R_7--$(CH_2)_n$–HC(NH_2)--CO-;

wherein

n is an integer from 0 to 3;

R_7 is selected from the group consisting of unsubstituted heteroaryl and monosubstituted heteroaryl, wherein said heteroaryl is ~~selected from the group consisting of furanyl, pyrrolyl, thiophenyl,~~ pyridinyl, ~~indolyl, benzofuranyl, benzothiophenyl,~~

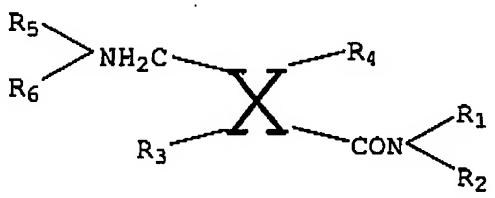
~~quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, pyrazinyl, primidinyl, purinyl, and pteridinyl,~~ and said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

X is independently selected from the group consisting to trans, trans >C==CH--HC==C<, trans >C==C<, and >C*H--$(CH_2)_m$--HC*< where "*" indicates a chiral carbon atom and R_3 and R_4 are oriented L- and D-(amino acid convention) at these respective chiral centers; and

m = 0, 1 or 2, or

a pharmaceutically acceptable salt, solvate or prodrug thereof.

31 (CURRENTLY AMENDED) A method of treating a mammal with insulin resistance of Type 2 diabetes mellitus, comprising administering to the mammal a pharmaceutically effective amount of a compound of the formula:



wherein:

R_1, R_2 and R_5 are independently selected from the group consisting of H and C_1--C_2 alkyl;

R_3 and R_4 are selected from C_2--C_8 alkyl;

R_6 is selected from the group consisting of H and the L- isomer (amino acid convention) of R_7--$(CH_2)_n$--$HC(NH_2)$--CO-;

wherein

n is an integer from 0 to 3;

R_7 is selected from the group consisting of unsubstituted heteroaryl and monosubstituted heteroaryl, wherein said heteroaryl is ~~selected from the group consisting of furanyl, pyrrolyl, thiophenyl,~~ pyridinyl, ~~indolyl, benzofuranyl, benzothiophenyl,~~

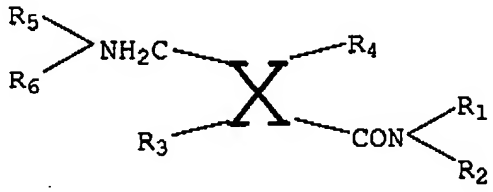
~~quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, pyrazinyl, primidinyl, purinyl, and pteridinyl,~~ and said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

X is independently selected from the group consisting of trans, trans >C==CH--HC==C<, trans >C==C<, and >C*H--$(CH_2)_m$--HC*< where "*" is a chiral carbon atom and R_3 and R_4 are oriented L- and D-(amino acid convention) at these respective chiral centers; and

m = 0, 1 or 2, or

a pharmaceutically acceptable salt, solvate or prodrug thereof.

32 (CURRENTLY AMENDED) A method of treating a mammal affected with pre-eclampsia/eclampsia, comprising administering to the mammal a pharmaceutically effective amount of a compound of the formula:



wherein:

R_1, R_2 and R_5 are independently selected from the group consisting of H and C_1--C_2 alkyl;

R_3 and R_4 are selected from C_2--C_8 alkyl;

R_6 is selected from the group consisting of H and the L-isomer (amino acid convention) of R_7--$(CH_2)_n$--$HC(NH_2)$--CO- ;

wherein

n is an integer from 0 to 3;

R_7 is selected from the group consisting of unsubstituted heteroaryl and monosubstituted heteroaryl, wherein said heteroaryl is ~~selected from the group consisting of furanyl, pyrrolyl, thiophenyl,~~ pyridinyl, ~~indolyl, benzofuranyl, benzothiophenyl,~~

~~quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, pyrazinyl, primidinyl, purinyl, and pteridinyl,~~ and said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

X is independently selected in each instance from the group consisting of trans, trans >C=CH--HC=C<, trans >C=C<, and >C*H--$(CH_2)_m$--HC*< where "*" indicates a chiral carbon atom and R_3 and R_4 are oriented L- and D-(amino acid convention) at these respective chiral centers; and

m = 0, 1 or 2, or

a pharmaceutically acceptable salt, solvate or prodrug thereof.

33. (NEW) The compound of claim 1 wherein X is either trans, trans >C=CH--HC=C< or trans >C=C<.

34. (NEW) The compound of claim 1 whrein X is either >C*H--$(CH_2)_2$--HC*< or >C*H--HC*<.